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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,141	09/09/2003	James M. Gessner	GP-302571	3035
7	590 05/04/2005		EXAMINER	
CHRISTOPHER DEVRIES General Motors Corporation			LEWIS, TISHA D	
			ADTIBUT	DADED MUMBED
	ail Code 482-C23-B21		ART UNIT	PAPER NUMBER
P.O. Box 300			3681	
Detroit, MI 4	8265-3000		DATE MAILED: 05/04/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

• •	Application No.	Applicant(s)			
	10/659,141	GESSNER, JAMES M.			
Office Action Summary	Examiner	Art Unit			
	TISHA D. LEWIS	3681			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on					
2a)⊠ This action is FINAL. 2b)☐ This	This action is FINAL. 2b) This action is non-final.				
	<i>,</i> — ,,				
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 49	53 O.G. 213.			
Disposition of Claims	•				
4)⊠ Claim(s) <u>1 and 3-21</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	vn from consideration.				
5) Claim(s) is/are allowed.	•				
6)⊠ Claim(s) <u>1 and 3-21</u> is/are rejected.		•			
7) Claim(s) is/are objected to.	r alastian raquirament				
8) Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examine					
10) ☐ The drawing(s) filed on is/are: a) ☐ acce	*				
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct  11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).			
1.☐ Certified copies of the priority documents have been received.					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
• •					
Attachment(s)		/DTO 442\			
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D	ate			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F	Patent Application (PTO-152)			
S. Patent and Trademark Office					

#### **DETAILED ACTION**

The following is a response to the amendment received on February 7, 2005 which has been entered.

### Response to Amendment

Claims 1 and 3-21 are pending in the application. Claim 2 has been cancelled.

- -The 112 2<sup>nd</sup> rejection of claims 13-15 has been withdrawn due to applicant correcting lack of antecedent basis for the traction load limitation.
- -The 102(b) rejection of claims 1-21 has been withdrawn due to applicant amending claims 1, 9 and 16 over the prior art of record.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroda et al ('170). Kuroda et al discloses a control system having a transmission (6), a controller (14) detecting driving conditions of a vehicle, the controller indicating a downshift of the transmission based on the conditions (downshifting directing means), the controller estimates a frictional resistance predetermined value of the downhill road and determines a frictional resistance of the road and selectively inhibits the downshift according to the frictional resistance (claim 8).

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Abiru ('601). Abiru discloses a control system having a transmission (4), a controller (21) detecting driving conditions of a vehicle (Figure 4), that indicates a downshift of the transmission according to the conditions (column 8, lines 53-57), that estimates a traction (F<sub>d</sub>) and determines a current traction (F(t)) and selectively inhibits a downshift according to a speed ratio control using the traction values (column 11, lines 34-39).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al ('995) in view of Kuroda et al and Abiru. As to claims 1, 3, 9, 10 and 16, Kondo et al discloses a shift control system and method for an automatic transmission having a transmission (1001), a controller (1004) detecting a downshift condition (engine load decrease) and vehicle driving conditions (i.e., vehicle speed, engine parameters, etc.), estimating a traction load (tire load, 112c) based on a lateral signal (GY used to determine tire load and maximum value of tire load to be used), estimating a current traction load (tire load, 112b) based on a longitudinal signal (GX)

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and performing a downshift (sporty degree decrease) based on the estimations if downshift conditions are met (engine load decrease conditions present: low engine speed, decreased throttle opening, etc.).

Kondo et al does not disclose selectively inhibiting the downshift according to the tire loads.

Kuroda et al and Abiru disclose a control system that selectively inhibits downshifts according to frictional and traction values as described in the 102 rejections.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Kondo et al with an downshift inhibiting means in view of Kuroda et al and Abiru to prevent unnecessary downshifting and uncomfortable feel of shifting to operator.

As to claims 4, 7, 11, 14, 17 and 20, Kondo et al discloses an accelerometer that detects the amount of lateral, longitudinal and acceleration of the vehicle (via 2013C, 2013D and throttle opening sensor).

As to claims 5, 12 and 18, Kondo et al discloses a vehicle speed signal directed to the lateral and longitudinal sensors for the time period the vehicle is driving (Figure 9).

As to claims 6, 8, 13, 15, 19 and 21, Kondo et al discloses the controller estimating a vehicle weight (RS), the weight/gradient change over time (RSF) and an acceleration signal (RA).

### **FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326 before final and 703-872-9327 after final**.

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Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence <u>not</u> permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check <u>should not be</u> submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 000-0000) on				
Typed or printed name of person signing this certificate:				
<u> </u>				
(Signature)				

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Aruga et al ('736) and Japanese patent 828695A.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 571-272-7093. The examiner can normally be reached on M-Thur 6 AM TO 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tdl May 1, 2005 PRIMARY EXAMINER

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